

| L<br>Number | Hits | Search Text   | DB                 | Time stamp          |
|-------------|------|---|--------------------|---------------------|
| 1           | 0    | align\$4 ADJ layer with (tilt\$3 ADJ bump)                | USPAT;<br>EPO; JPO | 2001/08/02<br>08:38 |
| 2           | 0    | align\$4 ADJ layer and (tilt\$3 ADJ bump)                 | USPAT;<br>EPO; JPO | 2001/08/02<br>08:35 |
| 3           | 257  | align\$4 ADJ layer with (tilt\$3 )                        | USPAT;<br>EPO; JPO | 2001/08/02<br>08:36 |
| 4           | 0    | align\$4 with (tilt\$3 ADJ bump)                          | USPAT;<br>EPO; JPO | 2001/08/02<br>08:38 |
| 5           | 4    | align\$4 and (tilt\$3 ADJ bump)                           | USPAT;<br>EPO; JPO | 2001/08/02<br>08:35 |
| 6           | 2    | align\$4 ADJ layer with (tilt\$3) and bump                | USPAT;<br>EPO; JPO | 2001/08/02<br>08:45 |
| 7           | 4    | (tilt\$3 ADJ bump)  | USPAT;<br>EPO; JPO | 2001/08/02<br>08:38 |
| 8           | 0    | align\$4 ADJ layer with (tilt\$3 ADJ spacer)              | USPAT;<br>EPO; JPO | 2001/08/02<br>08:39 |
| 9           | 0    | align\$4 ADJ layer with (tilt\$3 ADJ<br>projection)       | USPAT;<br>EPO; JPO | 2001/08/02<br>08:39 |
| 10          | 0    | align\$4 ADJ layer with (tilt\$3 ADJ groov\$3)            | USPAT;<br>EPO; JPO | 2001/08/02<br>08:40 |
| 11          | 0    | align\$4 ADJ layer with (bump with tilt\$3)               | USPAT;<br>EPO; JPO | 2001/08/02<br>08:45 |
| 12          | 0    | align\$4 ADJ layer and (bump with tilt\$3)                | USPAT;<br>EPO; JPO | 2001/08/02<br>09:06 |
| 13          | 272  | bump with tilt\$3   | USPAT;<br>EPO; JPO | 2001/08/02<br>08:46 |
| 14          | 1    | display with (bump with tilt\$3)                          | USPAT;<br>EPO; JPO | 2001/08/02<br>08:47 |
| 15          | 23   | display and (bump with tilt\$3)                           | USPAT;<br>EPO; JPO | 2001/08/02<br>08:47 |
| 16          | 13   | align\$4 ADJ layer with local                             | USPAT;<br>EPO; JPO | 2001/08/02<br>09:07 |
| 17          | 0    | local\$2 ADJ homeotropic ADJ align\$4                     | USPAT;<br>EPO; JPO | 2001/08/02<br>09:28 |
| 18          | 5    | homeotropic ADJ align\$4 with local                       | USPAT;<br>EPO; JPO | 2001/08/02<br>09:43 |
| 19          | 0    | random ADJ STN  | USPAT;<br>EPO; JPO | 2001/08/02<br>09:44 |
| 20          | 0    | random ADJ super ADJ twisted ADJ nematic                  | USPAT;<br>EPO; JPO | 2001/08/02<br>09:44 |
| 21          | 0    | super ADJ twisted ADJ nematic with<br>random              | USPAT;<br>EPO; JPO | 2001/08/02<br>09:45 |
| 22          | 188  | super ADJ twisted ADJ nematic and random                  | USPAT;<br>EPO; JPO | 2001/08/02<br>09:45 |
| 23          | 10   | super ADJ twisted ADJ nematic and random<br>ADJ align\$4  | USPAT;<br>EPO; JPO | 2001/08/02<br>14:00 |
| 24          | 1    | hybrid ADJ aligned ADJ nematic and<br>random ADJ align\$4 | USPAT;<br>EPO; JPO | 2001/08/02<br>10:23 |
| 27          | 0    | bump with plastic with photoresist                        | USPAT;<br>EPO; JPO | 2001/08/02<br>12:10 |
| 28          | 51   | bump with plastic and photoresist                         | USPAT;<br>EPO; JPO | 2001/08/02<br>12:10 |

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| 29 | 18    | (bump with plastic and photoresist) and height and shape                            | USPAT;<br>EPO; JPO | 2001/08/02<br>12:12 |
| 30 | 11    | ((bump with plastic and photoresist) and height and shape) and align\$4             | USPAT;<br>EPO; JPO | 2001/08/02<br>12:48 |
| 31 | 0     | random ADJ photomask  | USPAT;<br>EPO; JPO | 2001/08/02<br>12:15 |
| 32 | 50    | random ADJ mask   | USPAT;<br>EPO; JPO | 2001/08/02<br>12:19 |
| 33 | 1     | mask with random ADJ opening  | USPAT;<br>EPO; JPO | 2001/08/02<br>12:18 |
| 34 | 1295  | mask with random  | USPAT;<br>EPO; JPO | 2001/08/02<br>12:18 |
| 35 | 0     | random ADJ opening ADJ mask   | USPAT;<br>EPO; JPO | 2001/08/02<br>12:19 |
| 36 | 7     | (random ADJ mask) and opening   | USPAT;<br>EPO; JPO | 2001/08/02<br>12:41 |
| 37 | 1     | bump ADJ structure with plastic   | USPAT;<br>EPO; JPO | 2001/08/02<br>12:42 |
| 38 | 14009 | plastic with (polyimide or polyamide)   | USPAT;<br>EPO; JPO | 2001/08/02<br>12:49 |
| 39 | 337   | (plastic with (polyimide or polyamide)) and bump                                    | USPAT;<br>EPO; JPO | 2001/08/02<br>12:51 |
| 40 | 4     | bump with (plastic with (polyimide or polyamide))                                   | USPAT;<br>EPO; JPO | 2001/08/02<br>12:50 |
| 41 | 78    | ((plastic with (polyimide or polyamide)) and bump) and photoresist                  | USPAT;<br>EPO; JPO | 2001/08/02<br>12:51 |
| 42 | 30    | ((((plastic with (polyimide or polyamide)) and bump) and photoresist) and harden\$3 | USPAT;<br>EPO; JPO | 2001/08/02<br>12:52 |
| 43 | 0     | super ADJ twisted ADJ nematic with homogeneous ADJ align\$4                         | USPAT;<br>EPO; JPO | 2001/08/02<br>14:01 |
| 44 | 0     | super ADJ twisted ADJ nematic with planar ADJ align\$4                              | USPAT;<br>EPO; JPO | 2001/08/02<br>14:01 |
| 45 | 38    | super ADJ twisted ADJ nematic and homogeneous ADJ align\$4                          | USPAT;<br>EPO; JPO | 2001/08/02<br>14:01 |
| -  | 15287 | align\$4 with post  | USPAT;<br>EPO; JPO | 2001/08/01<br>16:29 |
| -  | 0     | align\$4 with (random ADJ post)   | USPAT;<br>EPO; JPO | 2001/08/01<br>16:29 |
| -  | 1     | align\$4 with (random ADJ bump)   | USPAT;<br>EPO; JPO | 2001/08/01<br>17:05 |
| -  | 2     | align\$4 with (bump with random)  | USPAT;<br>EPO; JPO | 2001/08/01<br>16:31 |
| -  | 13    | align\$4 ADJ layer with (bump or post)  | USPAT;<br>EPO; JPO | 2001/08/02<br>08:31 |
| -  | 0     | align\$4 ADJ layer and (random ADJ bump)  | USPAT;<br>EPO; JPO | 2001/08/01<br>17:08 |
| -  | 13    | align\$4 ADJ layer with random  | USPAT;<br>EPO; JPO | 2001/08/01<br>17:13 |
| -  | 17    | (random ADJ bump)   | USPAT;<br>EPO; JPO | 2001/08/01<br>17:07 |
| -  | 0     | align\$4 ADJ layer and (random\$6 ADJ bump)   | USPAT;<br>EPO; JPO | 2001/08/01<br>17:17 |
| -  | 0     | align\$4 ADJ layer and (random\$6 ADJ groov\$3)                                     | USPAT;<br>EPO; JPO | 2001/08/01<br>17:11 |

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| - | 3     | substrate and (random\$6 ADJ groov\$3)  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:15      |
| - | 18    | align\$4 ADJ layer with random\$6   | USPAT;   | 2001/08/02 |
| - |       |   | EPO; JPO | 12:09      |
| - | 3     | substrate and (random\$6 ADJ projection)                                      | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:16      |
| - | 0     | align\$4 ADJ layer and (random\$6 ADJ projection)                             | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:18      |
| - | 0     | align\$4 ADJ layer and (random\$6 ADJ (dome or pyramid or mound))             | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:21      |
| - | 2     | align\$4 and (random\$6 ADJ (dome or pyramid or mound))                       | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:20      |
| - | 0     | align\$4 ADJ layer and (random\$6 ADJ feature)                                | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:22      |
| - | 0     | align\$4 ADJ layer and (random\$6 ADJ post)                                   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 19:54      |
| - | 3     | random\$6 ADJ align\$4 ADJ layer  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:25      |
| - | 93302 | liquid ADJ crystal ADJ display  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:26      |
| - | 382   | 349/123   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:26      |
| - | 51    | 349/123 and random\$6   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:27      |
| - | 7     | 349/123 and random\$6 ADJ align\$4  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:30      |
| - | 0     | 349/123 and random\$6 ADJ bump  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:47      |
| - | 1     | (liquid ADJ crystal ADJ display) and random\$6 ADJ bump                       | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:31      |
| - | 1     | (liquid ADJ crystal ADJ display) and random\$6 ADJ (projection or groov\$3)   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:35      |
| - | 156   | (liquid ADJ crystal ADJ display) and random\$6 ADJ align\$4                   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:53      |
| - | 28    | ((liquid ADJ crystal ADJ display) and random\$6 ADJ align\$4) and homeotropic | USPAT;   | 2001/08/02 |
| - |       |   | EPO; JPO | 09:27      |
| - | 0     | align\$4 ADJ layer and (random\$6 ADJ step)                                   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:45      |
| - | 0     | 349/123 and random\$6 ADJ step  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:47      |
| - | 15    | (liquid ADJ crystal ADJ display) and random\$6 ADJ step                       | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 17:54      |
| - | 98    | hybrid ADJ align\$4   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 18:06      |
| - | 0     | (hybrid ADJ align\$4) with random   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 18:06      |
| - | 0     | (hybrid ADJ align\$4) and random ADJ bump                                     | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 18:07      |
| - | 13    | (hybrid ADJ align\$4) and random  | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 18:26      |
| - | 0     | orientation with random\$6 ADJ bump   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 18:15      |
| - | 0     | (hybrid ADJ align\$4) with random   | USPAT;   | 2001/08/01 |
| - |       |   | EPO; JPO | 18:24      |

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|---|------|--|--------------------|---------------------|
| - | 1    | (hybrid ADJ align\$4) and (bump with align\$4)   | USPAT;<br>EPO; JPO | 2001/08/01<br>18:27 |
| - | 23   | (liquid ADJ crystal ADJ display) with (hybrid ADJ align\$4)                            | USPAT;<br>EPO; JPO | 2001/08/01<br>19:03 |
| - | 0    | (hybrid ADJ align\$4) with azimuthal ADJ direction                                     | USPAT;<br>EPO; JPO | 2001/08/01<br>19:06 |
| - | 0    | homogeneous ADJ align\$4 with azimuthal ADJ direction                                  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:09 |
| - | 0    | homogeneous ADJ align\$4 with azimuthal  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:08 |
| - | 5    | homogeneous ADJ align\$4 and azimuthal ADJ direction                                   | USPAT;<br>EPO; JPO | 2001/08/01<br>19:37 |
| - | 2652 | bump with align\$4   | USPAT;<br>EPO; JPO | 2001/08/01<br>19:44 |
| - | 5    | (liquid ADJ crystal ADJ display) with (bump with align\$4)                             | USPAT;<br>EPO; JPO | 2001/08/01<br>19:40 |
| - | 71   | (liquid ADJ crystal ADJ display) and (bump with align\$4)                              | USPAT;<br>EPO; JPO | 2001/08/01<br>19:40 |
| - | 43   | bump and align\$4 ADJ layer  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:46 |
| - | 19   | (liquid ADJ crystal ADJ display) and (bump and align\$4 ADJ layer)                     | USPAT;<br>EPO; JPO | 2001/08/01<br>19:45 |
| - | 312  | groov\$3 and align\$4 ADJ layer  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:48 |
| - | 63   | (groov\$3 and align\$4 ADJ layer) and random\$6  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:48 |
| - | 0    | random\$6 ADJ groov\$3 and align\$4 ADJ layer  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:48 |
| - | 31   | ((groov\$3 and align\$4 ADJ layer) and random\$6) and (liquid ADJ crystal ADJ display) | USPAT;<br>EPO; JPO | 2001/08/01<br>19:48 |
| - | 5    | align\$4 ADJ layer and (random\$6 ADJ domain)  | USPAT;<br>EPO; JPO | 2001/08/01<br>19:55 |